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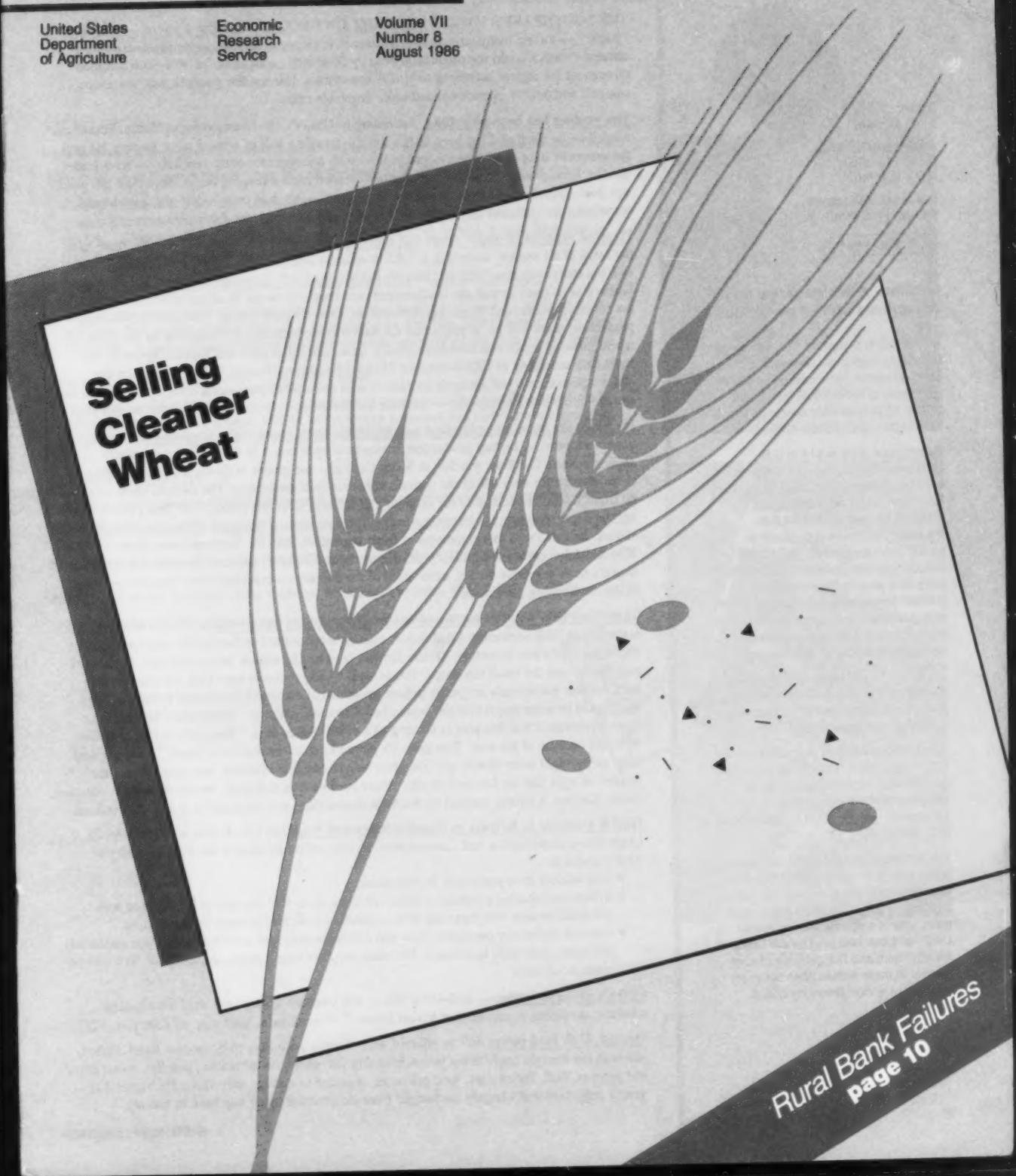

Selling Cleaner Wheat

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PERSPECTIVES

THE SOUTHEAST'S WORST DROUGHT ON RECORD has taken a severe — some say "tragic" — toll on many farmers from Delaware to Georgia. Farmers in the most seriously affected counties could see production drop by 50%-80%, with losses of 30%-50% common throughout the region, according to USDA economists. Hardest hit: pastures, hay, row crops, cow-calf and poultry operations, and some vegetable crops.

The weather has been punishing. According to USDA's chief meteorologist Norton Strommen, rainfall in the Southeast has been only a third to less than half of normal since January. He says the summer's light rainfall and record heat — with temperatures often over 100° — have made this the worst drought to hit the region since detailed record-keeping began more than 100 years ago. Mid-August rains came too late for some crops — such as corn — but may have brought some relief for soybeans and cotton. Still, yields will be way down, Strommen says.

Plentiful supplies of major crops will mask the Southeast's misfortune. Farmers there have the worst of all worlds, according to ERS economist Don Seaborg. "They don't have much to sell, but everybody else (here and abroad) has plenty to sell, especially in grains and oilseeds," Seaborg says. Even though the southeastern corn crop will be cut by about 45% this season, and the cotton, soybean, and sorghum crops will be down 35%-60% from 1984 and 1985 average production, there will be no impact on the nation's crop production. Production in the Corn Belt, where growing conditions have been almost ideal, will offset corn and soybean losses in the Southeast, according to ERS economist Michael Hanthorn. He adds that the impact on the nation's peanut crop will be more serious — with nationwide production down by 18% from the average of the past two seasons — because the Southeast accounts for 85% of the peanut crop.

It's much the same story in other commodities: heavy losses in the Southeast, but a minimal impact nationwide. In fruit production, losses have been heavy in three states particularly — apples in North Carolina, peaches in South Carolina, and grapes in Georgia — but together these states account for only 4% of the nation's noncitrus fruit production. The nation's apple crop will be slightly smaller because of the drought and an early frost this spring. This year's peach crop will be larger than last year's, but the fruit will be smaller, according to ERS economist Shannon Hamm. She also says that shipments of fresh vegetables from the Southeast were down 7% this June and July compared with last year. But since the Southeast accounts for only 2% of the nation's fresh vegetable output, other areas of the country — especially New England — can fill in the slack during the summer.

There may be a slight reduction in cattle herd numbers nationwide as a result of the drought, according to ERS economist Allen Baker, mainly because the five hardest hit states account for 9% of the beef cattle inventory. "Some farmers have had to market their cattle early because of poor forage and the small hay crop," Baker says. "And producers have been reluctant to ship hogs because the animals are prone to heat stress. Since extreme heat reduces fertility in hogs, there could be some impact on the September-November pig crop." For poultry, heat is also a serious problem, "but this year is nothing like 1980" Baker says. "Then, whole broiler houses were lost because of the heat. This year, it's more like a few broilers in a house." Heat-stressed birds gain weight more slowly, and slaughter weights decline. Extreme heat also reduces the number of eggs that are hatched. Poultry prices have increased sharply, but the drought is only one factor. Another is strong demand by fast food chains that have rolled out new chicken products.

Help is available to farmers in disaster-designated counties. Check with your local ASCS (Agricultural Stabilization and Conservation Service) office for details. Here's a summary of what's available:

- Low interest emergency and disaster loans.
- A feed cost-sharing program. USDA will share up to half the cost of buying feed with livestock farmers who have lost 40% or more of their feed because of the drought.
- Advance deficiency payments. Rice and cotton farmers may receive 40% of their estimated deficiency payments in advance. For other program crop farmers, payments of 50% will be made in advance.

USDA's drought hotline — 800-433-0703 — will continue taking calls until the situation subsides, according to coordinator Vivian Mann. Call weekdays, 8:00 a.m. to 6:00 p.m. EDT.

Overall, U.S. food prices will be affected only slightly, according to economist Ralph Parlett, although the drought could boost prices modestly for poultry, watermelons, peaches, sweet corn, and peanuts. Still, Parlett says, food prices are expected to average only about 3% higher this year, a projection that's largely unchanged from the estimate made way back in January.

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Falling exports and foreign complaints over U.S. wheat quality have prompted a proposal to more precisely measure the chaff, dust, and other non-millable material in wheat. Cleaning out the "dockage" should make U.S. wheat more attractive to our customers, but someone may have to foot the bill.

Why Smokeless Tobacco's Comeback May Burn Out *by Sherrie Biernacki* 8

Smokeless tobacco, frequently associated with baseball players or 19th century saloons, has made something of a comeback in the late 20th century. But the comeback is being challenged by health concerns, warning labels, and excise taxes.

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Although the farm financial crisis has hurt many rural banks, the sector as a whole is still in sound financial shape. USDA economists examine the current structure and financial condition of the commercial banking systems that serve rural America.

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Giving Foreign Buyers What They Want: Cleaner U.S. Wheat

Sluicing down a chute into the cargo hold of a ship bound for an overseas port, it looks to the naked eye like pure golden grain.

But sifted by hand, the wheat kernels sometimes reveal the presence of chaff, dust, and other materials that aren't millable.

More and more, it seems, foreign buyers of American wheat are asking: Has the United States lost its touch in supplying clean, high-quality wheat to world markets?

The concern—spurred by falling U.S. wheat exports and complaints by importing countries—has prompted action by the federal agency that inspects wheat before it can be exported. This spring, USDA's Federal Grain Inspection Service (FGIS) proposed more precise measurement of the non-millable material that can be easily removed (primarily the dust and chaff, collectively called "dockage").

Foreign purchasers normally pay only for millable material, meaning that dockage is deducted from the weight of the wheat that must be paid for. Tightening the reporting procedures—so that buyers have a better measure of dockage—might have the practical effect of pushing exporters to ship a cleaner product.

Current USDA grain standards permit almost half a percent of dockage to go unreported on the export certificate, which tells the buyer the quality and condition of the wheat. A shipment of export wheat can have as much as 0.49 percent dockage and still be certified as dockage-free. It can have as much as 0.99 percent dockage and be certified at 0.5 percent.

When the wheat reaches its destination at some foreign port or flour mill, the buyer may find more dockage than is stated on the export certificate, and possibly more than the buyer is willing to accept.

"Clean wheat is essential for certain food uses," says economist Mack Leath of USDA's Economic Research Service. "Moreover, the buyer pays for the extra weight of the undisclosed dockage not only in the initial purchase but also in freight charges, import levies, and other costs based on tonnage."

Digging Out Dockage

The FGIS proposal, published May 30, 1986, in the *Federal Register,* would require that dockage be reported to the nearest 0.1 percent (one-tenth of 1 percent). According to FGIS officials, "certifying dockage to the nearest 0.1 percent is more precise than the current method and should enhance the marketability of U.S. wheat."

In the proposal, FGIS officials make special note of the benefit this change should bring to the export of U.S. wheat: "Elimination of the problem of understated dockage would strengthen credibility of the official inspection certificate, enhance buyer confidence in the U.S. standards for wheat, and strengthen the competitive position of U.S. wheat in the world market."

They go on to suggest that confidence in U.S. wheat standards has fallen in importing countries.

"Many foreign buyers question the adequacy of the current dockage certification method, asserting that the actual dockage is almost always understated." In current practice, export shipments certified with "no dockage generally contain 0.35 to 0.45 percent dockage. Export shipments certificated at 0.5 percent dockage generally contain 0.6 to 0.9 percent dockage."

The comment period on the FGIS proposal ended July 14. FGIS officials say the proposed rule may become final by May 1987, just before the June 1 start of the next wheat crop year.

Changing the way dockage is measured may be a start, but the FGIS proposal still can't answer all the questions it raises about the costs of extra cleaning, and old concerns over dockage itself. To begin with, the economic effect of the proposal—should it be adopted as it stands—would likely be felt almost immediately on the price of a bushel of wheat.

Higher Prices?

"Dockage certified to the nearest 0.1 percent could affect price per bushel, but the

Grain Glut Adds Force and Volume to Buyers' Complaints

John Pitchford, an FGIS official who monitors international grain trade, says foreign concerns over U.S. grain exports are apparently becoming more widespread.

"These are not only complaints about dockage in wheat. They cover all grains, including corn and soybeans, and all aspects of grain—dockage, certainly, but foreign material, too, and damaged kernels." The number of such complaints received directly by FGIS jumped from 22 in fiscal 1984 to 71 in fiscal 1985.

Pitchford says the reasons for the foreign criticism flow partly from the "price and the strength of the dollar. It's a buyer's market, and foreign buyers are saying, 'I want better quality because I can go to Canada and Argentina and get better quality or the same quality for a lower price.'"

Foreign Complaints Over Grain Quality and Dockage in U.S. Wheat Rose Substantially in Fiscal 1985

	Total quality complaints[1]	Complaints about wheat	Complaints on wheat dockage
1977	20	11	0
1978	21	9	2
1979	27	12	2
1980	38	13	2
1981	17	8	2
1982	12	6	1
1983	13	7	0
1984	22	6	0
1985	71	19	5

[1]Complaints about U.S. wheat, corn, other grains, and soybean export quality.

Fiscal year data are from USDA's Federal Grain Inspection Service and reflect only those complaints reported to U.S. embassies. Not included are complaints made to shippers and trade associations by foreign purchasers.

effect depends on how market participants view the price quotations for wheat in relation to the certified dockage content," says economist Leath. Leath was commissioned by FGIS to analyze how the value of wheat might change if dockage regulations were revised.

"The total value of a particular crop would not change significantly," says Leath. "The amount paid for wheat with higher dockage levels would probably drop because the dockage would be reported and, thus, deducted from the weight of the lot. On the other hand, market price quotations for clean wheat would generally increase, offsetting the reduced value of the not-so-clean wheat."

The major question posed by the FGIS proposal, however, is: Who pays for the cleaning? And that relates directly to the other, older concern of who's responsible for dockage in the first place.

Is it the farmer, who has the natural problem of weed seeds and other chaff ending up among the wheat kernels sent to and stored in the grain elevator?

Or does the local elevator operator play a greater role, perhaps by allowing high-dockage lots to enter the marketing channel?

Is it the export companies that are at fault as they blend wheat lots with different dockage levels to create a uniform export product?

Finally, does part of the blame belong to U.S. surpluses and storage policies?

Although the responsibility within the U.S. marketing system is difficult to determine, the increased frequency of foreign complaints may have less to do with any recent erosion in U.S. grain quality than it has to do with the new realities of wheat trade in the 1980's.

A Buyer's Market

Simply put, nations that need wheat can afford to be, and are, more selective. A buyer's market has been born in the wake of world wheat supplies that are running very high. Added to that is the fact that other wheat producers—namely Australia, Canada, the European Community, and Argentina—have become aggressive competitors with U.S. wheat producers for global grain markets.

The growing chorus of complaints over dockage levels has risen at the same time that U.S. wheat exports have continued to decline.

Certainly, concern over the cleanliness of wheat bound for export had already prompted some hurried and heated debate among those who grow, store, and export wheat—even before the outlines of any federal recommendations or requirements became known.

The growing chorus of complaints over dockage levels—variously voiced in Japanese, Russian, Chinese, and Spanish—has risen at the same time that U.S. wheat exports have continued to decline. In 1984, U.S. wheat sales abroad totaled more than 1.4 billion bushels—far from their highest level. But last year exports dipped to 910 million bushels—reflecting a strong U.S. dollar and high prices for U.S. wheat, as well as greater competition from other wheat-exporting nations.

American wheat farmers have openly wondered whether quality is maintained by elevators that store wheat and traders who send it abroad. Elevator operators and exporters counter that the wheat leaving their hands is, in fact, often cleaner than when it leaves the farm.

FGIS officials say their inspections paint a mixed picture.

According to the agency's report on "U.S. Export Wheat Quality, 1985," export dockage levels were lower for some wheat classes than domestic dockage levels. In a couple of other classes, wheat was cleaner at some domestic inspection points than it was at export, signifying that the wheat was cleaner when it left the farm than when it left the export terminal.

The report states: "In 1985, export dockage levels were lower than dockage levels reported by state harvest surveys for hard red spring, durum, white wheat, and domestic truckload inspections for hard red winter, hard red spring, and white wheat. However, durum and soft red winter export dockage levels exceeded reported domestic truckIot levels."

Concerns have also emerged over the cleanliness and quality of U.S. corn and soybean exports, but most attention has centered on wheat, which is largely used by foreign purchasers for human consumption. FGIS officials are currently conducting public hearings to explore ways of cleaning up corn and soybean shipments. (FGIS recently announced stricter standards to control damage in soybeans, a separate but related issue also cited as a problem by foreign buyers.)

A Common Interest

Economist Leath says farmers, elevator operators, and exporters all share a common economic interest in cleaning up wheat. And he says current practices by some members of these groups contribute to the dockage problem.

"Producers who deliver wheat with a higher-than-average dockage content are subsidized by producers who deliver clean wheat to elevators that purchase on a station-average basis," says Leath. "Elevator operators could more often employ the use of screener devices or aspirator machines

which remove the dust, chaff, and insect fragments from the wheat kernels."

Exporters, of course, are the last, and most important link in the connection that ties the American farmer to the foreign consumer, says Leath.

"The free allowance for dockage under the current standards provides handlers with an incentive to blend high dockage lots with clean wheat lots," he says. "Clean wheat is an excellent raw material to use in blending to reduce the dockage content of high dockage lots."

He notes that a lot with 0.9 percent of dockage can be mixed with an equal size lot of clean wheat to yield a combined lot with an average dockage content of 0.45 percent. The combined lot would be certified as dockage-free. "Although this is a legitimate and common practice under current standards, it would likely be curbed considerably if dockage is certified to 0.1 percent increments," he says.

For their part, U.S. exporters say their shipments meet the specifications set forth in federal government standards.

Cleaning at Country Elevators

Wherever the problem may lie, a solution is apparently needed. Leath says the country elevators storing the grain may be the least expensive places to remove the dockage.

His view is supported by a case study done at Kansas State University by economist Harvey Kiser. Kiser, an associate professor of agricultural economics, recently examined the costs of more stringent wheat cleaning at country elevators.

His conclusion: Cleaning with screeners and aspirators would add as much as 1 cent a bushel to the cost of handling wheat. In some years, he says, that cost could be absorbed by savings realized from lower transportation costs in shipping the cleaner wheat and income derived from selling the dockage as animal feed to neighboring farms.

In contrast, says Kiser, cleaning at the port terminal before loading onto ships would be vastly more expensive.

Reducing the dockage may help increase customer loyalty, but it won't boost exports overnight.

"In one case, that of the grain elevator, you're using small-scale equipment and dealing in far fewer bushels. In the other, you're dealing with much larger quantities and heavy costs for far more elaborate machinery," he says.

By his own conservative estimate, Kiser says the costs of cleaning wheat at port facilities—as the Canadians do, for example—range from operating costs of 10 cents a bushel to 25 cents a bushel for all costs, including new buildings and land.

"There are other problems, though," he adds. "Some of these export terminals simply don't have the land on which to construct extensive new cleaning facilities."

Country elevators might have some difficulties, too, he cautions.

"How low can you afford to take dockage

Dust, Chaff, Weed Seeds, and Insects

Wheat is graded and certified for export by teams of inspectors working for USDA's Federal Grain Inspection Service (FGIS).

The dust, wheat chaff, and insect fragments that come under the category of "dockage" in wheat shipments do not affect the quality grade of wheat. Instead, the dockage is specified in percentage terms on the export inspection certificate.

Foreign material, on the other hand, is considered a grade-determining factor.

Why the apparent contradiction, when both dockage and foreign material must be removed before milling?

According to FGIS regulations, dockage is defined as "all matter other than wheat which can be readily removed from a test portion of the original sample by use of an approved device." Dust, chaff, and insect fragments are easily separated from wheat kernels by devices that sift out or "vacuum" up material of different size and weight from the kernels.

Foreign material is a little tougher to take out. It consists of all matter other than wheat that remains in a test portion after removal of dockage and shrunken and broken kernels—usually weed seeds or kernels of rye or other grains that are roughly the same size and shape as wheat kernels.

The percentage of foreign material must be 1.0 percent or less for a wheat shipment to meet the two highest grades—U.S. No. 1 or No. 2 wheat.

Particularly prone to high dockage (and foreign material) levels are durum and hard red spring wheat, which are both planted in the spring and generally harvested during August and September.

"The later harvest dates mean weeds have had a chance to grow and mature," says ERS economist Mack Leath. "Moisture is also a problem with spring wheats, which are usually cut and placed in windrows to dry in the field prior to threshing. All material in the windrows, including weeds, is run through the combine later."

These problems give a boost to Canadian producers who compete with U.S. producers of durum and hard red spring wheats.

The Canadian Wheat Board, which oversees all wheat exports from that country, requires export grain to meet more exacting standards than the United States. Cleaning costs are assessed and passed on to producers. "Canadians are competing with our classes of wheat that generally have

FGIS Inspector Byron School demonstrates a procedure to measure chaff and other dockage in a wheat sample. After bulkier material is sorted out by machine, an inspector may hand sift the sample for additional dockage. The total is then weighed to determine the percentage of dockage in the wheat lot, and that amount is officially reported on the inspection certificate. *Photo by Allen Atwood, FGIS*

down before you're taking out too much wheat, in the form of shrunken and broken kernels that are not dockage and count as wheat," he says. "The cost of cleaning will be more than a cent a bushel if it means lost sales because some wheat has been removed along with the chaff."

Making up that "margin" for the elevators could mean lower prices paid to wheat producers, he says.

Kiser also says that expectations of farmers (and others) for improved wheat exports, once dockage is lowered, may be unrealistic.

"It's a mix of factors that influence the export market," he says. "How do you balance dockage with price, with credit, with competitors' subsidy programs?"

Lowering dockage will help, Kiser says, "but it won't boost exports overnight. What it will do is make happier customers who will be likely to stay with us longer." □

[Based primarily on information provided by economist Mack Leath of the National Economics Division, Economic Research Service, and Harvey Kiser, associate professor of agricultural economics, Kansas State University.]

higher dockage and foreign material levels."

Dockage is decried for another reason: Together with temperature and moisture, it has a direct link to insect infestation. That can create an extra export problem.

"Dockage greatly enhances the capacity of certain insects to develop and reproduce in stored wheat because dust and chaff serve as a food supply," says Leath. "Since dockage creates a favorable environment for insects, cleaning wheat prior to storage would be one means of controlling certain insects."

FGIS does not inspect wheat arriving at foreign destinations. Any deterioration in wheat quality during the trip abroad—from the spread of insects, for example—would thus be missed.

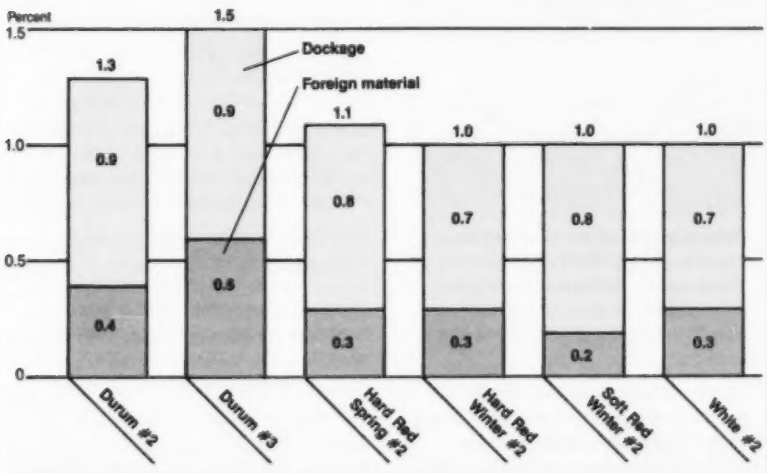
But FGIS officials say their inspections here show U.S. wheat export quality to be good—and getting better.

In 1984, FGIS says, 95 percent of the 1.4-billion-plus bushels of wheat exported received the highest grades, U.S. No. 2 or better. Last year, 96 percent of the 910 million bushels of wheat inspected for export was graded U.S. No. 2 or better. Most foreign buyers of U.S. wheat request the U.S. No. 2 grade, except durum buyers who ask for U.S. No. 2 or 3.

The average dockage for all classes of U.S. wheat exported in 1985 was 0.7 percent. The average foreign material and dockage combined for all classes was 1.0 percent, equal to the maximum foreign material allowed for U.S. No. 2 wheat. By class, hard red spring and durum wheat exceeded the 1.0-percent level when dockage and foreign material were counted jointly.

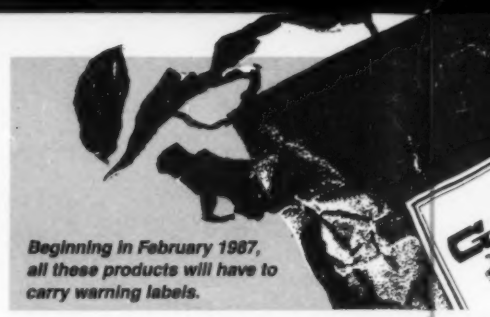
Even though they produce for a relatively small portion of the overall wheat market, durum producers may have reason to be especially concerned about wheat export quality. The majority of their production over the past 3 years, an average of 59 percent, has been channeled into export markets. Only producers of white wheat have a higher export percentage of production (64 percent) over the last 3 years.

By Class, Durum and Hard Red Spring Wheats Had the Highest Export Levels of Dockage and Foreign Material Combined in 1985*



*Figures from export inspections conducted by USDA's Federal Grain Inspection Service. Figures have been rounded.

Why Smokeless Tobacco's Comeback May Burn Out



Beginning in February 1987, all these products will have to carry warning labels.

Smokeless tobacco, frequently associated with baseball players or 19th century saloons, has made something of a comeback in the late 20th century. But the comeback is being challenged by health concerns, warning labels, and excise taxes.

Almost 136 million pounds of smokeless tobacco products—chewing tobacco and snuff, which are both used orally—were produced in 1985, up from the low point of 92.5 million in 1968. And more than 12 million Americans at least tried some form of smokeless product last year, according to the Department of Health and Human Services (HHS).

"The renewed popularity of smokeless tobacco may be due to three reasons," says Verner Grise, tobacco analyst with USDA's Economic Research Service. "First, the industry has made a major effort in advertising its smokeless products. Second, more and more workplaces are banning smoking, so smokeless tobacco becomes a possible alternative. And a third reason could be that people are switching from cigarettes to smokeless tobacco because they perceive it as being less of a health risk."

Before the 1920's, smokeless tobacco products were readily accepted by Americans. In fact, during one point in the 1800's, "chewing" was considered a national pastime. All that changed, however, when the public spitting associated with smokeless tobacco started being viewed as unsanitary and antisocial.

According to Grise, use of smokeless tobacco fell from an average of about 5½ pounds per person in the late 1920's to a low of about 1¼ pounds in the late 1960's. Use started rising again in the mid-1970's, peaking at about a 1½ pounds in 1980. Since then, use has fallen slightly but has remained above the 1960's low.

"All the recent decline is in chewing tobacco, while the snuff market has grown," Grise says. "Employment is down in some industries where chewing tobacco is typically used, such as heavy manufacturing. This may have contributed to the drop."

The recent rise in the use of smokeless tobacco is being challenged by health concerns, warning labels, and new taxes.

The Specter of Health Concerns

While smokeless tobacco will probably never again take the nation by storm, the increase in its use, particularly among young men, has some health officials concerned.

More teenage and young adult males have been using smokeless tobacco during the last few years. According to a survey by the HHS Office on Smoking and Health, 3 percent of American males 16 to 19 years of age and 4 percent of men in their 20's chewed tobacco in 1985, compared with 1970 statistics of 1 percent of the teenagers and about 2 percent of the young men. About 3 percent of both the teenagers and young men used snuff last year, compared with less than 1 percent in 1970.

"Peer pressure is a big factor in smokeless tobacco use among young males," says Tim Hensley of the Office on Smoking and Health. "It seems to be the thing to do. Also, advertising does carry some weight with young people."

The concern about the popularity of smokeless tobacco among teenage and young adult males relates directly to the health issue.

In a recently released report, U.S. Surgeon General C. Everett Koop linked use of smokeless tobacco with oral cancer, other diseases of the gum and mouth, and nicotine addiction.

While Koop's list of health risks seems to grow with additional research, the tobacco industry sees his statements as a rush to judgment. The Smokeless Tobacco Council views the studies on which the surgeon general based his report as insufficient. The council sees a need for more independent research to answer questions concerning smokeless tobacco and cancer.

While the debate continues, Congress has taken some steps, passing the Comprehensive Smokeless Tobacco Health Education Act of 1986 on February 27. The act requires that warning labels be placed

A Leaf from the Pages of History

Chewing was probably one of the earliest uses of the tobacco plant. Primitive man probably taste-tested the plant and found that it helped quench thirst and ward off hunger—two important benefits in a hostile environment.

Early explorers to the New World reported seeing American Indians chewing tobacco. These explorers, in turn, introduced tobacco to Europe in both its smoked and smokeless forms.

During the 17th and 18th centuries, inhaling snuff was all the rage in Europe and the American colonies—particularly among aristocrats. However, chewing tobacco was never popular with the Europeans.

After the American Revolution, the colonists rejected snuff along with other European customs and turned to tobacco chewing. In the 19th century, the spittoon was everywhere, from courts and legislative halls to bars, restaurants, and private homes.

With the turn of the century, public spitting was proven to spread tuberculosis, so the use of chewing tobacco came to be regarded as an unsanitary habit and it gradually tapered off—until recently.

Whether health concerns, new legislation, and the reinstated federal tax on smokeless tobacco will drive chewing tobacco and snuff back into the pages of history remains to be seen.

on smokeless tobacco containers and in printed advertisements beginning February 1987. The labels, which are to appear on a rotating basis, are:

- This product may cause oral cancer.
- This product may cause gum disease and tooth loss.
- This product is not a safe alternative to cigarettes.

Moreover, the law bans television and radio advertising of smokeless tobacco beginning in late August 1986. The law also requires HHS to conduct public education programs on the dangers of using smokeless tobacco.

Taxes May Be Biggest Blow

On top of the surgeon general's report and congressional legislation, the smokeless tobacco industry may face an even tougher restraint on sales: new taxes.

On April 7, 1986, Congress passed the first federal excise tax on smokeless tobacco products since the tax was abolished in 1966. Since July 1, 1986, snuff has been taxed at 24 cents a pound and chewing tobacco at 8 cents a pound. In terms of tax per container, this comes out to 1.5 cents for 1 ounce of snuff or 3 ounces of chewing tobacco.

Also, the number of states that tax smokeless tobacco has been increasing. In 1985, 20 states taxed some form of smokeless tobacco. In the 1920's, not a single state levied a tax on any form of smokeless tobacco.

Taxes, according to Grise, could take a toll on smokeless tobacco use.

"Many times, taxes are more effective than health campaigns in reducing tobacco use," he says. "Because of taxes and health warnings, any future increases in smokeless tobacco use will probably be smaller over the next few years. Much depends on the amount of publicity surrounding health concerns." □

[Based largely on information provided by economist Verner Grise of the National Economics Division, Economic Research Service.]

Tobacco Names and Numbers

Just as you sometimes need a scorecard to tell baseball players apart, you need a "scorecard" to tell the difference between types and classifications of smokeless tobacco.

Smokeless tobacco is divided into two products: snuff and chewing tobacco. Snuff is rarely inhaled through the nose as it once was, but is now placed between the cheek and gum and left there unchewed.

Chewing tobacco tends to be coarser than snuff, although some snuff closely resembles chewing tobacco. It would take an expert to tell the difference.

Chewing tobacco is mixed with flavorings, such as sugar, honey, or licorice, and comes in three forms: plug, twist, and loose leaf. Plug gets its name from an old method of preparation that involved "plugging" honey-soaked tobacco into holes drilled in logs and leaving the tobacco to cure. Twist gets its name from its shape—moist tobacco that is twisted into braids.

Loose leaf, originally called scrap, came into being with machine-threshed tobacco. In the process of removing the leaf from the stem (threshing), usable tobacco fragments remain that can be incorporated into loose leaf chewing tobacco.

Loose leaf is the most widely produced form of chewing tobacco. About 74 million pounds of loose leaf chewing tobacco were manufactured in 1985, compared with about 11½ million of plug and 1½ million of twist.

Snuff has two forms. Dry snuff is pulverized tobacco, usually unflavored or unscented. Moist snuff is coarser, cut rather than pulverized. Flavorings or scents, such as licorice, clove, or cinnamon, are usually mixed into the tobacco.

The moist snuff led the market with about 40 million pounds produced in 1985. Dry snuff production, about 9 million pounds, is less than a fourth of the moist form's total.

Chewing tobacco is almost exclusively a male product, but some women do use snuff, particularly the traditional dry variety.

"Interestingly, snuff in some areas of the country—particularly the South—has traditionally been as much a woman's product as a man's," says tobacco analyst Verner Grise. "When I was growing up, snuff was used by older ladies. Snuff-using grandmothers would discipline their grandsons for chewing tobacco or smoking."

How Healthy Are Rural Banks?

Commercial banks provide credit and financial services in all communities, but they are especially important in rural areas. The main reason, according to USDA economists, is that a county's commercial bank may be one of only a few facilities that can provide easily accessible financial services to its residents.

Because this is so significant, economists Jim Mikesell, Dan Milkove, and Pat Sullivan of the Economic Research Service examined the current structure and financial condition of the commercial banking systems that serve rural America. They found that although the farm financial crisis has hurt many rural banks, the sector as a whole is still in sound financial shape.

There are, however, wide variations in this picture of health. Some areas, particularly heavily agricultural ones such as the Corn Belt and Plains states, have been harder hit with commercial bank failures than other areas of the country.

"Rural and agricultural bank failures have increased dramatically in the last 3 years," Milkove says. Together, rural and agricultural banks comprised 85 of the 118 commercial bank failures in 1985. Over 60 percent of these failures occurred in the Corn Belt and the Plains states, according to economist Greg Gajewski, also of the Economic Research Service.

The numbers are in sharp contrast with 1981, when just seven banks failed, but the failure rate is still relatively small, Milkove says. Last year's 118 failures accounted for less than 1 percent of the approximately 14,000 commercial banks in the country, of which about 7,900 are rural, including roughly 5,000 agricultural banks. (Most ag banks are also classified as rural.)

Rural banks are those which are headquartered in nonmetropolitan areas. But what gives a bank the ag classification? The Federal Reserve Board (FED) classifies a bank as agricultural if its ratio of farm loans to all loans is above the simple average of such ratios at all banks, says FED economist Emanuel Melichar. For agricultural banks as a group, farm loans currently constitute 35.7 percent of total loans, far above the 3.4-percent average in the banking system as a whole.

Over 60% of 1985's ag bank failures occurred in the Corn Belt and the Plains states.

During the 1970's, Melichar says, ag banks prospered along with most of the farm sector. But as many of their borrowers became financially stressed, the fortunes of these agricultural lenders also faded.

Faded Fortunes

The primary causes of financial stress in the farm sector have been pinpointed by economists: falling commodity prices, sagging exports, and a strong U.S. dollar overseas.

"All the problems become significantly worse," Mikesell says, "when you consider the steep drop in farmland values, especially in the Midwest. This means that the collateral a farmer has to put up for a loan is getting smaller and smaller. In short, many farmers are simply losing their borrowing power." And this is one farm problem that isn't likely to make an abrupt change in direction anytime soon. "It's a fundamental downward adjustment of asset values," Mikesell explains.

As the value of farm loan collateral declines, and as more farmers fall behind on loan payments, he adds, banks must take steps to counteract the deteriorating quality of their loan portfolios.

When loan portfolios go bad, banks not only have to answer to stockholders and depositors, they also must contend with federal and state regulators. Regulators often require banks with loan-quality problems to increase their reserve funds in order to cover possible losses. The result: lower profits. That's when answering to the demands of stockholders often takes the shape of somewhat harsher loan terms, according to Sullivan. And this affects nonfarm borrowers too. "Higher interest rates, tougher collateral requirements, and a more detailed cash flow analysis are often required," he says.

To reduce risk, some rural banks may make fewer local loans, instead deciding to invest their funds in securities, or sell funds on the federal funds market.

The extent to which problems among agricultural banks (or any commercial bank) are transmitted to the local economy depends heavily on the structure of the local banking system, Sullivan says. Communities that are most likely to be affected are obviously those that are dependent upon farming as a source of employment and income.

But even in areas that are primarily agricultural, the local banking structure may cushion the impact of problems among agricultural banks if there is a mix of the types of banks that can provide financial services. "Those markets served by competitive, diversified banking structures are less likely to lose easy access to financial services. In markets served by only a few agricultural banks, the picture is less rosy," Sullivan says.

Alternatives to Ag Banks

In addition to local commercial banks, many rural communities are served by

Bank Failures: Steep Increases, Particularly for Agricultural Banks

	1981	1982	1983	1984	1985
All commercial banks	7	33	44	77	118
Rural banks	3	19	15	41	81
Agricultural banks	1	10	7	31	69

Compiled by Greg Gajewski of the Agriculture and Rural Economics Division, Economic Research Service.

branches of urban-based banks, or by affiliates of statewide multibank holding companies (MBHC's). MBHC's are firms which own two or more legally separate banks, often located throughout the state, and sometimes in bordering states. There are two major benefits of this kind of banking diversification: an increase in competition within local credit markets, and the option of using larger banks that have more diversified loan portfolios that can help stabilize credit during local economic downturns.

A look at the system of banks serving the credit needs of rural counties in 1983 revealed 36 percent of the nation's nonmetro counties were served by five or more bank firms, a sign of adequate diversification, according to the economists. At the other end of the spectrum, 29 percent were served by only one or two bank firms. The average number of banks serving nonmetro counties is four. The numbers are very different in urban America. Major metropolitan areas can have as many as 400 bank firms. The average number of banks serving metropolitan counties is 12.

Sensitivity to the behavior of one or two banks in rural counties is not uncommon. If the ag banks tighten credit requirements, other bank firms may follow suit, Mikesell says. Moreover, if a local bank fails, the remaining banks may extend fewer loans so that their liquidity positions are improved, and they appear safe, Sullivan says.

Not only does this leave many borrowers vulnerable should a local bank fail, but it also puts a damper on competition.

The greater the number of banks, the more competition within the local market, but local banking systems, particularly those serving counties that are heavily dependent on farming, may still be seriously affected by local economic downturns. If most of a county's banks, no matter what their affiliation, lend heavily to local businesses and farms, the system as a whole lacks the loan diversification that is so important for stability under unfavorable local economic conditions, Milkove says.

In 1983, 42 percent of rural counties were served by "self-contained" banking systems (that is, headquartered within the county with no intercounty branches, and by banks not affiliated with a multicounty MBHC). At the other extreme, 10 percent of rural counties were served only by banks headquartered elsewhere. The remainder were served by a mix of local and nonlocal bank organizations.

Arguments can be made for and against intercounty and interstate commercial bank branching, the economists say. It is probably best to have the option of purchasing financial services from either a local bank or the branch of a larger bank.

Local bankers may be in a better position to evaluate their customers' loan requests through first hand knowledge of the community. "Outsider" banks often reserve loan decisions for the "home office" that lacks knowledge of the local economic conditions.

On the other hand, larger bank institutions are likely to be more insulated from local market conditions. As a result, local economic downturns may affect the local lending behavior of larger banks less than they do small, independent banks.

In 1983, only 23 percent of rural counties (and 11 percent of farm-dependent counties) were served by a commercial bank with at least $500 million in assets. Nearly all of these were in states that allow statewide branching of commercial banks. In the Midwest, where restrictions on branching are common, MBHC's represent a type of "quasibranching."

If MBHC's with $500 million or more in assets are considered as equivalent to similarly sized banks, then 41 percent of rural counties (and 27 percent of farm-dependent counties) were served by a bank that is probably insulated from local economic conditions. These percentages are far below those of metropolitan counties where virtually all areas are served by at least one, and usually several, commercial banks that have $500 million or more in assets. □

[Based on information provided by economists Jim Mikesell, Dan Milkove, Pat Sullivan, and Greg Gajewski of the Agriculture and Rural Economics Division, Economic Research Service.]

Why Rural Banks Remain Small

Banks that are headquartered in rural America are different from those rooted in the urban areas of the country. Simply put, rural banks are more conservative. They tend to have lower loan-to-deposit ratios, higher profit rates, and relatively fewer long-term securities than urban-based banks. Rural banks also tend to sell their excess reserves on the federal funds market. And most of them are small.

In 1983, over 60 percent of all rural banks were "independent," one-office operations. More than half were "agricultural banks." This means they have above-average concentrations of farm loans in their loan portfolios.

Why do most rural banks remain small, and why are many classified as agricultural banks? Two main reasons, according to USDA economist Jim Mikesell. First, most rural banks are located in states that have unit banking and limited-branch banking laws. And many of these same states are heavily agricultural.

Unit and limited branch banking laws restrict a bank's ability to open branch offices, particularly outside the county in which the bank is headquartered. When branching is restricted, more banking firms are needed to service an area. This tends to keep these rural banks fairly small, with total assets usually under $50 million.

As a result, many of the banks simply lack the deposit base and loan demand needed to become large, or even medium sized, Mikesell says. And since small banks usually service local markets, those in agricultural areas tend to lend heavily to farmers. Hence, they are agricultural banks.

Can We Recapture Our Trade Share?

U.S. agriculture's share of world grain trade dropped sharply in the 1985/86 season, notes economist Steve MacDonald of USDA's Economic Research Service.

Part of the problem was depressed world trade volume. Of equal concern, however, was the fact that the brunt of the overall trade decline was borne by U.S. exports.

Global wheat trade, for example, dropped by about 20 million metric tons in 1985/86. U.S. wheat exports absorbed two-thirds (14 million tons) of the drop. As a result, the U.S. share of world wheat trade dipped below 30 percent, down from an average of more than 40 percent during the previous 15 years.

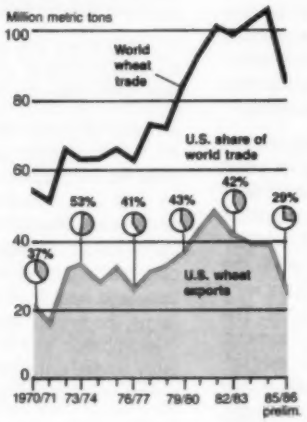
Similar share losses for the United States were evident in the world market for corn and other coarse grains, MacDonald says. In 1985/86, the U.S. share of world coarse grain trade dropped to about 43 percent, after averaging around 60 percent over the previous 15 years.

Although American farmers can still claim a remarkably large share of global grain trade, recent losses help explain the current push to recapture markets and revitalize exports with competitive pricing policies and new trade initiatives. Will they work?

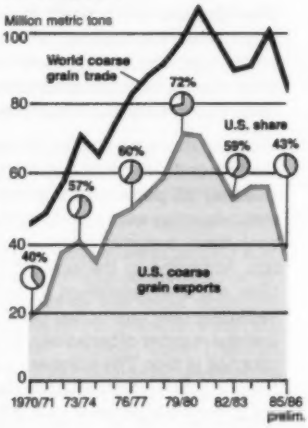
It's too soon to be sure, according to MacDonald, but there are some indications that the worst could be over. Tentative USDA forecasts for 1986/87 show increases in U.S. exports of both wheat and corn.

"Our prospects for larger sales in the future and a recovery in lost shares may depend heavily on the overall direction of world trade," MacDonald maintains. "In the past, when world trade volume has been expanding, the United States has generally done very well. On the other hand, when world trade has contracted, the sales reductions have often come primarily at the expense of the United States."

Wheat: The U.S. Share of World Trade Dips Below 30%



Coarse Grains: The Decline in World Trade Comes Out of U.S. Exports



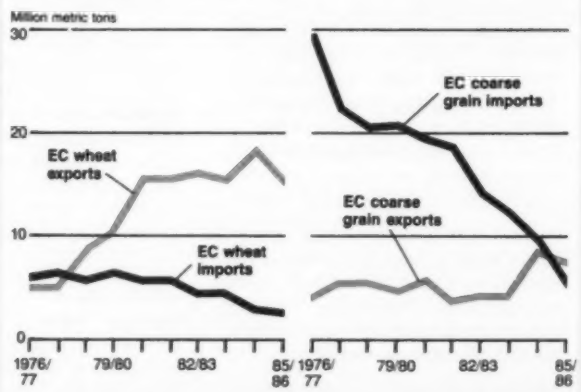
Gleaning

THE EUROPEAN COMMUNITY'S SHIFT from a net grain importer to a net exporter is an impressive achievement from the European perspective. For American grain farmers, however, it has meant a shrinking EC market and growing competition, often at subsidized prices, in many other markets. The rapidity and magnitude of the EC shift is illustrated in the accompanying chart, which takes into account the two newest EC members, Spain and Portugal.

. . . just 10 years ago, the twelve current EC members were net importers of both wheat and coarse grains, says economist Stephen Sposato of the Economic Research Service. In the case of wheat, for instance, the twelve imported a combined total of around 6 million metric tons and exported about 5 million tons. By the 1985/86 season, in contrast, they imported less than 3 million tons of wheat and exported more than 15 million, according to preliminary estimates. USDA forecasts suggest that EC wheat imports may drop again and exports may rise slightly in the year ahead.

. . . also, back in 1976/77, the twelve nations were huge importers of coarse grains (corn, sorghum, barley, oats, rye, and mixed grains). In the period of a decade, Sposato notes, their coarse grain imports declined from nearly 30 million metric tons to an estimated 5.3 million in 1985/86. Meanwhile, their exports of coarse grains (mainly from France) climbed from 4.1 million tons to a record 8.8 million in 1984/85 and an estimated 7.3 million in 1985/86.

The EC Shifts from a Net Importer to a Net Exporter of Wheat and Coarse Grains



Data from 1976/77-1985/86 are for all twelve current members of the EC (including this year's two new members, Spain and Portugal). Data exclude intra-EC trade.

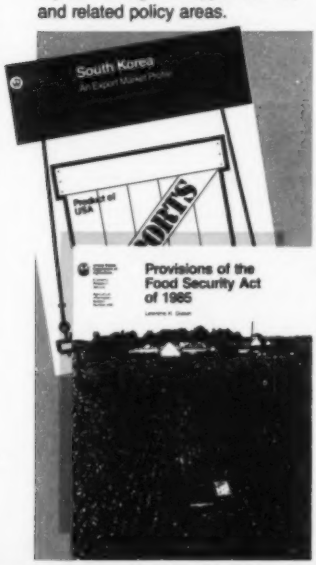
From Aquaculture to Wool

The milk production termination program, reductions in price supports, cotton and rice marketing certificates, Food for Progress, and the conservation reserve are a few of the new programs or approaches introduced by the Food Security Act of 1985.

Although two laws have already been passed to alter or redefine some of its provisions, the 1985 act establishes the broad framework to guide federal agricultural and food policy through 1990.

Separate titles of the 1985 act deal with these commodities: dairy, wool and mohair, wheat, feed grains, cotton, rice, peanuts, soybeans, and sugar. Another title outlines general commodity provisions affecting base acreages, payment limitations, and advance payments to producers.

Other provisions focus on trade, conservation, credit policy and funding authorizations, agricultural research and extension, food assistance programs, marketing, aquaculture, grasshopper control, and related policy areas.



This report summarizes all 18 titles of the 1985 act and draws some comparisons with previous legislation. The report includes a brief history of agricultural legislation and a glossary of agricultural policy terms.

Provisions of the Food Security Act of 1985 *by Lewrene Glaser and others. (Published April 1986; 105 pages; GPO Stock No. 001-019-00461-4; $5.50.)*

Market Profile: South Korea

South Korea has nearly 2 million farms of its own and a population of only about 40 million, yet it's one buyer that "deserves close attention by U.S. agricultural interests."

This is the conclusion of a recent report on South Korea's potential as a growth market for U.S. agricultural products in the years ahead. Here are a few reasons for the report's generally optimistic tone:

- growth rates for South Korea's economy are expected to remain very high. Rising incomes, demographic changes (more women in the workforce, for example), and a growing population will stimulate demand for many items.
- already a major world supplier of textiles and footwear, the country is rapidly becoming a large exporter of ships, consumer electronics, automobiles, steel, and heavy industrial products. Larger export earnings will finance greater imports in coming years.
- although self-sufficiency in rice has been largely achieved, a limited amount of arable land and the small-scale, high-cost nature of its farm sector make continued agricultural imports a virtual necessity for this densely populated, mountainous nation.

Future opportunities to expand U.S. exports are promising for several commodity groups, including: feed grains and oilseeds needed to support a developing meat sector; hides to supply a strong and still-growing leather goods industry; cotton for the country's large textile exports; and tallow as a cooking oil for a food processing industry.

Among the obstacles to greater U.S. sales are Korean import barriers to fruits, vegetables, and processed foods. However, South Korea's trade surplus with the United States may give the U.S. government enough leverage to insist on the lowering of some trade barriers. A greater threat may be protectionist measures in the industrialized nations, including the United States, that restrict imports of textiles and other products supporting the trade-dependent South Korean economy.

South Korea currently ranks among the top half-dozen buyers of U.S. farm products, with purchases that have averaged around $1.7 billion a year since 1980. In most years, 50 to 70 percent of its agricultural imports come from the United States.

South Korea: An Export Market Profile by John Dyck and Donald Sillers. *(Published May 1986; 74 pages; GPO Stock No. 001-019-00427-4; $4.00.)*

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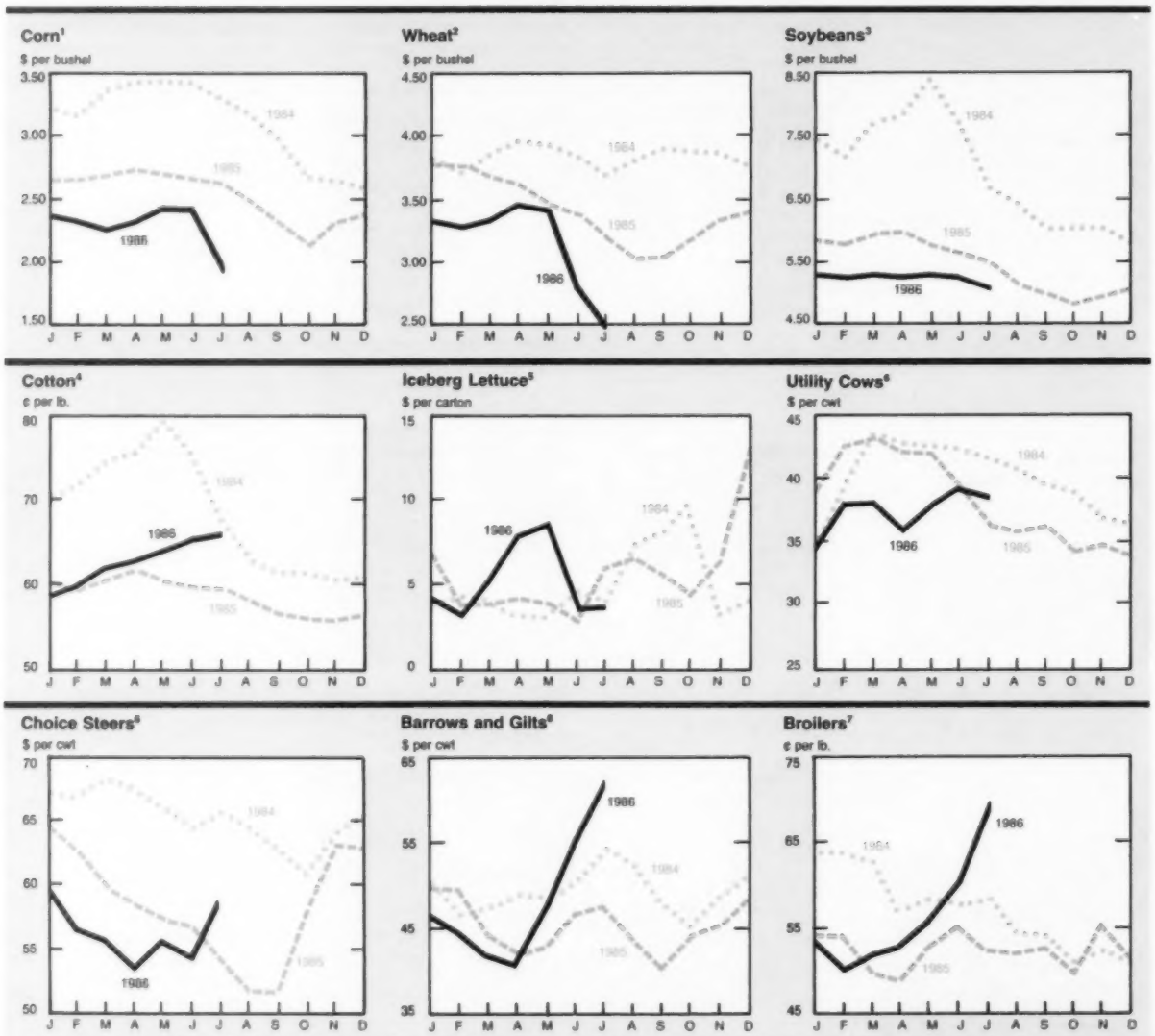
Monthly Price Monitor

USDA's July index of farm prices increased 2.5% from June but was 1.6% below its year-earlier level. Corn prices dropped to $1.93 per bushel, the lowest since October 1982. Wheat declined another 29¢ to $2.49, and soybeans were down 9¢ from June's average to $5.15. Cotton edged up half a cent to 65.7¢ a lb., the eighth consecutive monthly rise. In the meat animals area, utility cow prices were down slightly, while choice steers gained almost $4 to $58.16, the highest price since January. Barrows and gilts jumped to $61.96, up $21 since April and the highest price since September 1982. Broilers surged to 69.1¢ a lb., up 15¢ since the beginning of the year. All prices shown are monthly averages.

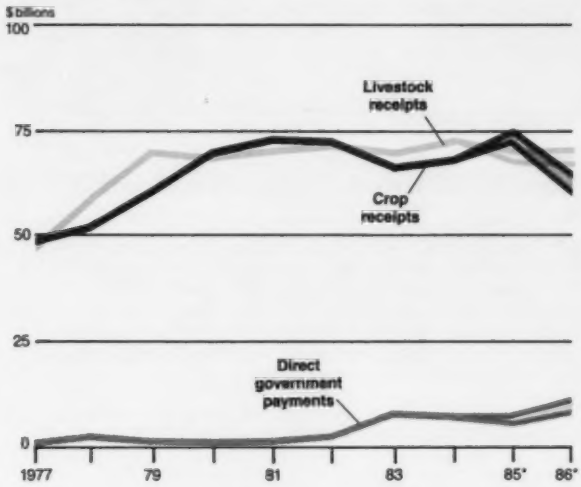


[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1⅛" spot market price. [5]Standard carton 24's, California-Arizona. [6]Omaha. [7]Wholesale, New York.

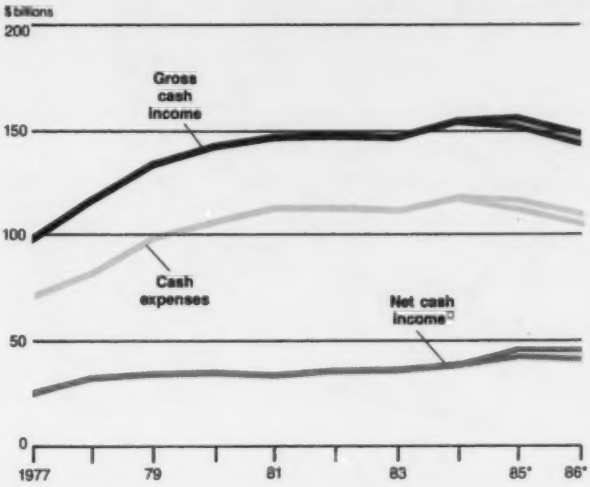
Farm Income Trends

How is the income side of the farm financial picture shaping up this year? Economist Gary Lucier, a farm income analyst with USDA's Economic Research Service, provides some answers, which are presented in the charts below. Ranges for 1985 are still preliminary estimates, and projected ranges for 1986 are very tentative, he stresses. Though figures may change as the year progresses, farm income prospects for 1986 suggest the following:

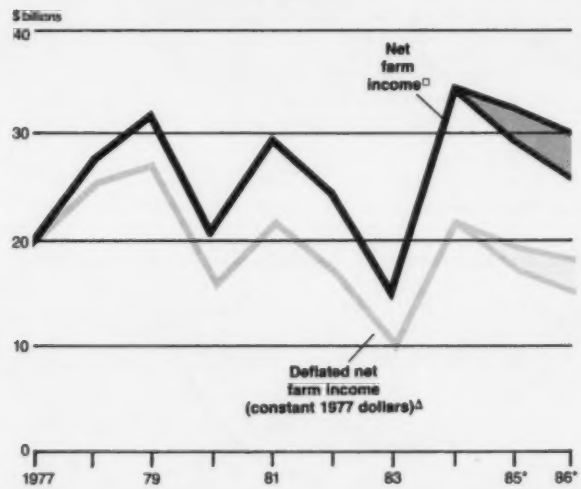
A Sharp Drop in Crop Receipts, But a Big Increase in Government Payments



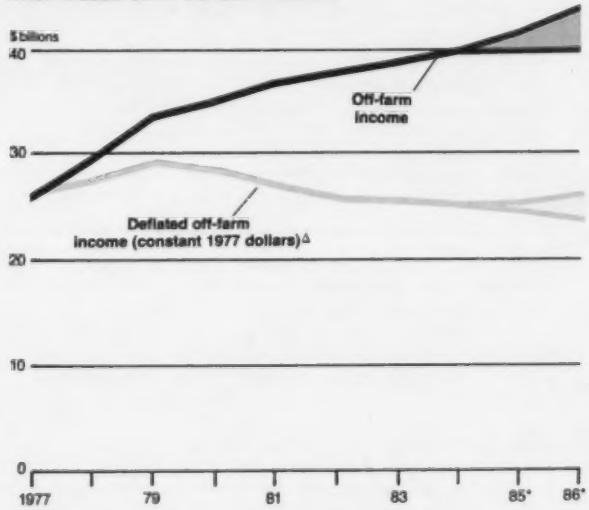
Net Cash Income Near Last Year's Record High, as Gross Income and Cash Expenses Both Decline



Net Farm Income Ranging from $26-$30 Billion, But Much Lower After Adjustment for Inflation



Off-Farm Income on an Upward Trend, Though Fairly Stable When Measured in Constant Dollars



*Preliminary range for 1985; projected for 1986. □Net cash income differs from net farm income in several respects, the most significant of which is probably an adjustment for the value of inventory change in the net farm income figure. Thus, net farm income approximates the value of a given year's production whether or not that production is marketed, while net cash income attempts to measure the income that farmers actually receive in a calendar year. ΔAdjusted for inflation using the GNP implicit price deflator.

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